



## INTERIM GUIDANCE

### Interim Guidance for Travelers to Areas Affected by the Tsunami

On December 26, 2004 at 0058 hours GMT, a strong earthquake (<http://www.fema.gov/areyouready/earthquakes.shtm>), which had a magnitude of 8.9 on the Richter Scale occurred off the west coast of Northern Sumatra, Indonesia. A subsequent tsunami (<http://www.fema.gov/areyouready/tsunamis.shtm>) hit South, Southeast Asia, and East Africa causing thousands of deaths and serious, widespread damage to buildings, roads, and power lines.

**The following areas are those affected by the earthquake and the tsunami:**

**Sri Lanka** – coastal areas of south, north and east

**Indonesia** – Sumatra (province Aceh)

**India** – coastal areas of south and east, Andaman and Nicobar Islands

**Thailand** – Phang-Nga province, Phuket, Phi Phi Island and Krabi

**Malaysia** – northwestern states

**Maldives** – entire islands

**Burma (Myanmar)** – southern coastline

**Somalia, Tanzania and Kenya** – eastern coastlines

The U.S. Department of State advises that Americans avoid travel to Sri Lanka and the Maldives at this time and that non-essential travel be deferred until further notice to Indonesia and the Phang-Nga province, Phuket, Phi Phi Island and Krabi Islands of Thailand. It is not recommended that family and friends searching for missing persons travel to these regions. For professional assistance with locating a missing American national, contact the U.S. Department of State <http://travel.state.gov/> or other regional embassies or consulates. For nationals of other countries, the appropriate embassy or consulate should be contacted. Relief organizations or international health agencies will sometimes assist with these efforts during times of crisis.

### Risks and Health Recommendations

If you must travel, you should be aware of the risks and the measures to be taken to minimize those risks. It is strongly recommended that all travelers to these regions consult with a travel medicine specialist (see <http://www.istm.org> to locate a specialist) for immunizations, prophylactic medications and appropriate education, ideally 4-6 weeks prior to travel because most vaccines take time to become effective in your body and some vaccines must be given in a series over a period of days or sometimes weeks. If it is less than 4 weeks before you leave, or if you anticipate imminent travel, you should still see your doctor. Pregnant women should avoid travel to affected areas, especially areas where malaria exists (<http://www.cdc.gov/travel/pregnant.htm>) because of increased health risks to the mother and her unborn child.

### *Immunizations*

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Some of the vaccines listed below (polio, influenza, typhoid, measles, etc) require a single dose and can be given at the same visit. Some vaccine schedules can be accelerated. All travelers to affected areas should be sure their routine immunizations are up to date (tetanus/diphtheria, polio, measles, etc). Because the possibility of infections and disease outbreaks is increased following disasters, the following vaccines are recommended:

- **Tetanus/diphtheria (Td)** vaccine or booster, if vaccine or booster was 5 years ago or more.
- **Hepatitis A**
- **Hepatitis B**
- **Influenza**, if you will be working with populations affected by the tsunami or are in a priority group for vaccination (see, <http://www.cdc.gov/flu/protect/vaccineshortage.htm>). Otherwise, if you are a healthy person who is not in a target group for influenza vaccine this year, please contact your Local or State Health Department to find out about local influenza vaccine availability and local recommendations on its use. Live attenuated influenza vaccine is available for most healthy persons 5-49 years of age who are not pregnant, for details see <http://www.cdc.gov/nip/publications/acip-list.htm>.
- **Typhoid** (oral or injectable)
- **Polio**, if you have not had a booster since childhood.
- **Measles**, if you are not immune. Immunity can be assumed if you have documentation of measles diagnosed by a physician, laboratory evidence of measles immunity, proof of receipt of two doses of live measles vaccine on or after your first birthday, or you were born before 1957. However, measles or MMR vaccine may be given if there is reason to believe you might be susceptible.
- **Rabies**, is endemic in these areas. Proper administration of the rabies preexposure series (days 0, 7 and 21 or 28) requires at least 3 weeks to complete. Although there may be an increased risk of exposure to stray animals in countries affected by the tsunamis and thus an increased risk of exposure to rabies, there would be little to no value in instituting **incomplete** preexposure prophylaxis for rabies. In the event of an exposure, the individual would be considered unimmunized and should receive full post exposure prophylaxis (i.e., RIG + 5 doses of vaccine). If either rabies immune globulin or rabies vaccine is not available at the destination, in the event of an animal bite, the exposed person should either return home or travel to the closest major city where these biologics are available and initiate their rabies post exposure prophylaxis as soon as possible.
- **Japanese encephalitis (JE)**, is endemic in SE Asia. Although there may be an increased risk of Japanese encephalitis in all countries in Asia affected by the tsunami, full vaccination requires 2-4 weeks to complete (days 0, 7, 14 or 30). However, an abbreviated schedule of 2 doses (days 0, 7) has been shown to provide seroconversion in 80% of vaccinees and possibly higher in some populations. Because serious adverse reactions to the vaccine (generalized itching, respiratory distress, angioedema, anaphylaxis) can occur in some individuals up to 1 week after vaccination, travelers should be aware of the possibility of delayed reactions. Vaccination is not recommended for imminent travel and travelers should take measures to prevent mosquito bites, such as the use of insect repellent and sleeping under insecticide-treated bed nets (preferably treated with permethrin) <http://www.cdc.gov/travel/bugs.htm>. For travelers scheduled to depart in 2 weeks or more, JE vaccine should be administered (<http://www.cdc.gov/travel/diseases/jenceph.htm>)
- **Cholera vaccine**, if outbreaks of cholera are being reported (since this immunization is not available in the U.S., it would have to be obtained at an intermediate destination and would require some time for antibody protection to develop)
- **Yellow fever** vaccine is recommended only if you are traveling to the affected areas in East Africa. **There is no yellow fever risk in Asia.** However, some countries may require documentation of yellow fever vaccination for people traveling from yellow fever endemic areas.

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### ***Malaria Prophylaxis***

There is no immunization against malaria and although no antimalarial drug is 100% protective, taking antimalarial drugs correctly and consistently is the most important factor in preventing this debilitating and potentially fatal condition. Because no antimalarial drug is 100% effective, travelers may become infected with malaria. Malaria symptoms can include fever and flu-like illness, including chills, headache, muscle aches, and fatigue. Malaria may also cause low blood cell counts (*anemia*) and yellowing of the skin and whites of the eye (*jaundice*). If not promptly treated, infection with *Plasmodium falciparum*, the most harmful malaria parasite, may cause coma, kidney failure, and death. Travelers who become ill with a fever or flu-like illness either while traveling in a malaria-risk area or after returning home (for up to 1 year) should seek immediate medical attention and should tell the physician their travel history.

Because conditions for malaria transmission are present (flooding, heavy rains, potential migration of malaria-infected persons into affected areas, a breakdown in mosquito control) even in areas where antimalarial drugs had not previously been recommended, as a precaution, antimalarial drugs should be taken by travelers to all affected areas except the Maldives. The following is a list of recommended antimalarial drugs\* by country. The appropriate antimalarial drug for you will be determined by you and your health-care provider.

Doxycycline should be considered as the antimalarial drug of choice because it has the added benefit of protecting against other infections, such as leptospirosis. See this website for a full description of the drugs and their side effects: <http://www.cdc.gov/travel/malariadrugs.htm>.

Sri Lanka – A/P, Dox, Mef

Indonesia – A/P, Dox, Mef

India – A/P, Dox, Mef

Thailand – A/P, Dox, Mef (Phang-Nga province, Phuket, Phi Phi Island and Krabi) and Dox or A/P for areas bordering Burma/Cambodia

Malaysia – A/P, Dox, Mef

Burma (Myanmar) – A/P, Dox, Mef and Dox or A/P in the eastern part of country.

Somalia , Tanzania and Kenya – A/P, Dox, Mef

**\* (Atovaquone/proguanil or A/P (brand name Malarone™), Doxycycline or Dox (many brand names and generics are available), Mefloquine or Mef (brand name: Lariam™ and generic).**

### ***Risks from Injury***

The risk for injury during and after a natural disaster is high. Persons who anticipate the need to travel in tsunami-affected areas should wear sturdy footwear to protect their feet from widespread debris present in these areas. Tetanus <http://www.cdc.gov/travel/diseases/dtp.htm> is a potential health threat for persons who sustain wound injuries. Any wound or rash has the potential for becoming infected and should be assessed by a health-care provider as soon as possible. Any wounds, cuts, or animal bites should be immediately cleansed with soap and clean water. You should also be familiar with basic first aid to self-treat any injury until you can get medical attention.

Motor vehicle crashes are a leading cause of serious [injury](#) among travelers. Protect yourself from motor vehicle injuries: avoid drinking and driving; wear your safety belt; follow the local customs and laws regarding pedestrian safety and vehicle speed; obey the rules of the road; and use helmets on bikes, motorcycles, and motor bikes. Avoid boarding an overloaded bus or mini-bus. Where possible, hire a local driver.

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### ***Preventing Electrocutions***

During power outages, many people use portable electrical generators (<http://www.bt.cdc.gov/poweroutage/workersafety.asp>). If the portable generator is improperly sized, installed, or operated, it can send power back to the electrical lines. This problem is called backfeed or feedback in the electrical energy in power lines. Backfeed can seriously injure or kill repair workers or people in neighboring buildings. Stay away from downed power lines.

Electrical power and natural gas or propane tanks should be shut off to avoid fire, electrocution, or explosions. Use battery-powered flashlights and lanterns, rather than candles, gas lanterns, or torches.

### ***Risks from Food and Water***

Natural disasters contribute to the spread of many serious food and water-borne diseases, especially since water supplies and sewage systems have been disrupted. Diarrheal diseases, [typhoid](#), [hepatitis A](#) and [E](#) can possibly occur. Measures to ensure food and water are safe is of great importance in preventing the spread of such diseases. Food should be thoroughly cooked and salads and ice cubes should be avoided. If a trusted source of bottled water is not available, water should be boiled or disinfected. For more details, see <http://www.cdc.gov/travel/foodwater.htm>.

If travelers diarrhea (TD) develops, loperamide (Imodium) can be taken as directed and if carrying an antibiotic for self-treatment of acute diarrhea, such as a fluoroquinolone (e.g. ciprofloxacin), begin treatment. As an alternative, azithromycin can also be used. This medication can be taken until symptoms subside which typically takes anywhere from one to 3 days, although in the current circumstances, may take longer. If diarrhea is accompanied by high fever or blood, the individual should try to seek medical care. Hydration is key to the effective management of any diarrheal disease. Though oral rehydration solutions are ideal for treatment of severe diarrhea, replacement of lost fluids by drinking clean water is the most important means of maintaining wellness.

As with other infectious illnesses, one of the most important preventive practices is careful and frequent hand washing. Cleaning your hands often using either soap and water or waterless, alcohol-based hand wash removes potentially infectious materials from your skin and helps prevent disease transmission.

### ***Risks from Insect Bites***

Because of standing water in these areas, mosquito breeding can become a problem and outbreaks of [malaria](#), [Japanese encephalitis](#) and [dengue](#) are possibilities. In addition to malaria prophylaxis and Japanese Encephalitis vaccine, other measures should be used for protection from mosquito and other insect bites. Use insect repellent containing DEET (<http://www.cdc.gov/ncidod/dvbid/westnile/mosquitorepellent.htm>), wear long sleeved shirts and long pants when outdoors, sleep under an insecticide-treated bed-net ([http://www.cdc.gov/malaria/control\\_prevention/vector\\_control.htm](http://www.cdc.gov/malaria/control_prevention/vector_control.htm)).

### ***Risks from Snake Bites***

Displaced reptiles, such as snakes, are likely to be found following flooding and other natural disasters. Attempts to kill snakes are dangerous. The venom of a small or immature snake can be even more concentrated than that of larger ones; therefore, all snakes should be left alone. Fewer than half of all

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snakebite wounds actually contain venom, but travelers should be advised to seek medical attention any time a bite wound breaks the skin.

If medical care is rapidly available then initial treatment should include immobilization of the affected limb and minimizing physical activity as much as possible (ideally of the entire patient) while transport to a medical facility occurs. If care is delayed, then a loose fitting pressure bandage that does not restrict arterial and venous flow (but does limit lymphatic flow) is the recommended first-aid measure while the victim is moved as quickly as possible to a medical facility. Tourniquets that impair blood flow to the affected limb are generally contraindicated.

Specific therapy for snakebites is controversial, and should be left to the judgment of local emergency medical personnel. Snakes tend to be active at night and in warm weather. As a precaution, boots and long pants should be worn when walking outdoors at night in areas possibly inhabited by venomous snakes. Proper protection such as the aforementioned clothing, careful attention to one's surroundings and overall avoidance of contact are the best measures that can be taken to avoid injury.

### ***Other Risks***

[Leptospirosis](#) may occur in those who wade, swim, or bathe in waters contaminated by animal urine. [Plague](#) infection is usually caused by the bite of rodent fleas, but also may be acquired by direct contact with infectious materials or inhalation of infective droplets. In addition, exposure to animal bites, most notably dogs in resource-poor countries, poses a risk for rabies and other infections.

Potential hazards exist from displaced land mines in areas of prior conflict. Stay on highways and asphalt roads to minimize chances of contact with landmines. Aftershocks may continue to occur so for safety, avoid coastal areas affected by tsunami, including avoidance of travel by boat and swimming in bodies of water in those regions. Arrange to sleep in the highest location possible.

During natural disasters, technological malfunctions may release hazardous materials (e.g., release of toxic chemicals from a point source displaced by winds, seismic motion, or rapidly moving water). Natural disasters may also lead to air pollution. Lung infections may occur after inhalation of sea water. Disasters resulting in massive structural collapse can cause the release of chemical or biologic contaminants (e.g., asbestos or arthrospores leading to fungal infections). Travelers with chronic pulmonary disease may be more susceptible to adverse effects from these exposures.

There are health risks related to extremely hot temperatures such as found in these areas (heatstroke) and the effects of the sun on the eyes (cataracts) and skin (skin cancer, sunburn), see <http://www.cdc.gov/chooseyourcover/SunDay-brochure.htm>. For eye protection, wear wraparound sunglasses that provide 100 percent UV ray protection. Always wear a broad-spectrum (protection against both UVA and UVB rays) sunscreen and lip screen with at least SPF 15. Familiarize yourself with the signs of illness related to extreme heat and what to do, see [http://www.bt.cdc.gov/disasters/extremeheat/heat\\_guide.asp#def](http://www.bt.cdc.gov/disasters/extremeheat/heat_guide.asp#def).

### ***Psychological/Emotional***

Because of the tremendous loss of life, serious injuries, missing and separated families, and destruction of whole areas, it is important to recognize the situation you encounter may be extremely stressful. Keeping an item of comfort, such as a family photo, favorite music, or religious material nearby can often offer

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comfort in such situations. Checking in with family members and close friends from time-to-time can also be a source of support. For additional mental health resources, see <http://www.bt.cdc.gov/disasters/tsunamis/mentalhealth.asp>.

### ***Illness Abroad***

If you develop fever, cough, unusual rash, or difficulty breathing while traveling, you should get medical attention as soon as you possibly can.

Because illness and injury are a real possibility for people going to areas following a natural disaster, if at all possible, try to identify a doctor who could treat you ahead of time. Realize that most functioning hospitals and clinics may be busy receiving hundreds of people who have been injured and therefore would be unable to treat travelers. If you become seriously ill, you may require evacuation to other parts of a country or out of the country to receive adequate medical care. Consider purchasing a supplemental health insurance policy that includes evacuation insurance (see the U.S. Department of State website for additional information, <http://travel.state.gov/>).

### ***Security***

The governments of Indonesia and Sri Lanka have declared national disasters and the government of Maldives has declared a national emergency. The affected area in Thailand was a popular tourist destination where many American tourists remain unaccounted for. As a result of the situation, the U.S. Department of State has issued country-specific travel advisories, for details see [http://travel.state.gov/travel/cis\\_pa\\_tw/tsunami/tsunami\\_2016.html](http://travel.state.gov/travel/cis_pa_tw/tsunami/tsunami_2016.html).

Americans currently present are also encouraged to register with the American Embassy in certain of these countries. For details about this and to obtain up-to-date information on security conditions, you can call 1-888-407-4747 toll-free in the United States and Canada (317-472-2328 from overseas) and visit the U.S. State Department website at:

[http://travel.state.gov/travel/cis\\_pa\\_tw/tsunami/tsunami\\_2016.html](http://travel.state.gov/travel/cis_pa_tw/tsunami/tsunami_2016.html). If you have called to inform the Department of State about an unaccounted for American citizen and have since determined that the individual is safe, please call 1-888-407-4747 to relay that information.

Be aware, some of the affected countries may also restrict access to certain areas because of health or security concerns. Follow any local laws pertaining to restricted travel, curfews, etc.

Always carry passports and travel documents (in a water-tight packet) and make sure a family member/friend has copies of the passport and other travel documents, as well as details of your travel plans and how to contact you. Also, make arrangements to check in with family/friends at specific intervals

### ***Suggested Items to Bring with You***

- Prepare and carry a travel health kit (<http://www.cdc.gov/travel/other/travelers-health-kit.htm>) to include any medications you may be taking as well as additional supplies of medications as these will not be available at the destination; include antidiarrheal medication, an antibiotic for self-treatment of most causes of acute bacterial illness, insect repellent, sunscreen, and an ample supply of antimalarial medication with additional emergency supplies. See the website noted above for other suggested items.

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- Familiarity with basic first aid, such as wound or burn care, for emergency self-treatment until medical attention can be obtained is also recommended. This website provides basic first aid information, [http://www.redcross.org/services/disaster/0,1082,0\\_217\\_00.html](http://www.redcross.org/services/disaster/0,1082,0_217_00.html)
- A sufficient supply of food (canned and processed may be safest in some areas) and water, or means of water purification (<http://www.cdc.gov/travel/food-drink-risks.htm>)
- Sunglasses and a wide brim hat for protection from harmful UV rays
- Extra batteries for any item that uses them

### ***On Return Home***

On return home from one of the affected areas, travelers who become ill for any reason should receive a medical evaluation. For those who were in one of the regions affected by the tsunami, this should include psychological support and counseling as necessary. Returning travelers should seek health care in the event of fever, rash, respiratory illness or any other unusual symptoms. If you become ill with a fever or flu-like illness either while traveling in a malaria-risk area or after you return home (for up to 1 year), you should seek **immediate** medical attention and tell the physician your travel history.

CDC is monitoring the situation closely. We recommend those travelers to these regions check the Travelers Health webpage (<http://www.cdc.gov/travel/>) and the U.S. Department of State web site ([http://www.travel.state.gov/travel/cis\\_pa\\_tw/pa/pa\\_tsunami.html](http://www.travel.state.gov/travel/cis_pa_tw/pa/pa_tsunami.html)) for updates. A brief list, though not all inclusive, of medical assistance companies include International SOS ([www.internationalsos.com/members\\_home/Tsunami/](http://www.internationalsos.com/members_home/Tsunami/)), MedAire and MEDEX travel assistance.

See these websites for more information about health recommendations for travel to South East Asia and South Asia (Indian subcontinent), <http://www.cdc.gov/travel/seasia.htm> and <http://www.cdc.gov/travel/indianrg.htm>.

### ***Infectious Diseases Concerns Associated with the Indian Ocean Tsunamis***

To learn more about other infectious diseases known to exist in some of the countries affected by the recent tsunamis and that you might be at risk for, see

#### **From Food or Water**

- [Diarrheal Illness](#)
    - [Cholera](#)
    - [Cholera from Health Information for International Travel](#)
    - [Management of Acute Diarrhea](#)
  - [Hepatitis A](#)
    - [Hepatitis A from Health Information for International Travel](#)
  - [Hepatitis E](#)
    - [Hepatitis E from Health Information for International Travel](#)
  - [Typhoid Fever](#)
    - [Typhoid Fever from Health Information for International Travel](#)
  - More information:
    - [Q & A: Foodborne Illness](#)
    - [Diagnosis and Management of Foodborne Illness](#)
    - [Flooding and Communicable Diseases Fact Sheet: Risk Assessment and Preventive Measures](#)
- From the World Health Organization (WHO)

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### From Animals or Mosquitoes

- [Leptospirosis](#)
  - [Leptospirosis from Health Information for International Travel](#)
- [Plague](#)
  - [Plague from Health Information for International Travel](#)
- [Rabies](#)
  - [Rabies from Health Information for International Travel](#)
- [Malaria](#)
  - [Malaria from Health Information for International Travel](#)
- [Japanese Encephalitis](#)
  - [Japanese Encephalitis from Health Information for International Travel](#)
- [Dengue](#)
  - [Dengue from Health Information for International Travel](#)
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### Respiratory Diseases

#### [Avian Flu](#)

For more information, visit [www.bt.cdc.gov/disasters/tsunamis](http://www.bt.cdc.gov/disasters/tsunamis), or call the CDC public response hotline at 888-246-2675 (English), 888-246-2857 (español), or 866-874-2646 (TTY).